

REMARKS

In the Office Action Summary on page 1, Box 4 under the "Disposition of Claims" indicates that claims 1-250 are pending in the application. Applicants note that this is not correct.

A Preliminary Amendment was filed with the U.S. national phase application transmittal on November 28, 2005 in which claims 53-105, 108-181, 184-193 and 196-245 were cancelled and claims 106, 107, 194 and 247-251 were amended. Accordingly, claims 1-52, 106, 107, 182, 183, 194, 195 and 246-251 are pending in the application.

Restriction Requirement

The Office Action indicates that the claims are subject to restriction and election pursuant to 35 U.S.C. §§121 and 372 and requires Applicants to elect a single invention from Groups I and II below to which the claims must be restricted:

Group I, claims 1-105, 182-245, and 248-249, drawn to a hybrid inorganic/organic material comprising a polymerized scaffolding nanocomposite (PSN), and a separating device comprising the scaffolding nanocomposite (PSN).

Group II, claims 106-181, 246-247, and 250, drawn to a method of preparation of a hybrid inorganic/organic material comprising the polymerized scaffolding nanocomposite (PSN).

Applicants provisionally elect, subject to the traverse below, Group I, reading on pending claims 1-52, 182, 183, 194, 195, 248 and 249.

Applicants respectfully traverse the requirement for restriction and election and submit that the requirements are improper.

The Office Action alleges that the inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. In particular, the Office

Action alleges that although the polymerized scaffolding nanocomposite (PSN) is the special technical feature, there is lack of unity because the PSN does not constitute a contribution over the prior art in view of US2003/0021730 to Muller, *et al.*

Applicants respectfully disagree and assert that Groups I and II represent different embodiments of a single inventive concept for which a single patent should issue. The pending claims represent an intricate web of knowledge, continuity of effort, and consequences of a single invention, which merit examination of all of these claims in a single application.

More particularly, a single, searchable, unifying aspect links all of the claims. This single, searchable, unifying aspect is the PSN. This common technical feature is a feature of every claim.

The term PSN is defined in the application at page 15, lines 17-25 as follows:

The language "polymerized scaffolding nanocomposite (PSN)" refers to hybrid composite materials that comprise a polymerized organic nanophase surrounded by an inorganic nanophase, *e.g.*, polymerized siloxane, wherein the nanophases form independently through independent reactions, *e.g.*, a polymerization and a sol gel reaction, and wherein the organic and inorganic nanophases interconnect by chemical bond formation through a hybrid monomer, *e.g.*, by condensation of the inorganic phase, *e.g.*, of the hybrid monomer to an inorganic monomer; and polymerization of the organic phase, *e.g.*, radical polymerization, such that a hybrid material forms with a plurality of surface scaffolding functionalities.

There is no teaching or suggestion of such PSN's in Muller, *et al.*

Furthermore, Applicants submit that a sufficient search and examination with respect to all species recited in the claims can be made without serious burden. As MPEP § 803 states:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

That is, even if the various groups of claims are patentably distinct, the Examiner must still examine the entire application on the merits because doing so will not result in a serious burden.

Applicants submit that the search and examination of all the claims will have substantial overlap, and no serious burden will result from searching and examining all claims in the same application. This is especially true given the robust and extensive computerized search engines and databases at the Examiner's disposal. Moreover, Applicants submit that when searching the hybrid inorganic/organic materials comprising a polymerized scaffolding nanocomposite (PSN), the Examiner will necessarily search methods for making those materials.

Accordingly, in the interests of efficiency and cost savings to both Applicants and the Patent Office, Applicants respectfully request that the requirements for restriction and election be withdrawn and that all claims be searched and examined.

If a telephone call with Applicants' representative would be helpful to resolve any issues regarding the requirement for species election and/or to otherwise expedite prosecution of the application, Applicants invite the Examiner to contact the undersigned at the telephone number shown below.

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Respectfully submitted,

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